



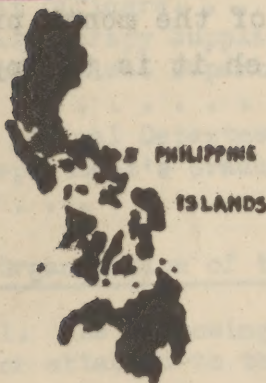
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CIRCULAR NUMBER 5

MEDICAL SECTION

GHQ FEC



1 MAY 1947

### Articles for Publication in Circular

It is desired that the Monthly Circular Letter published by the Medical Section, GHQ, FEC, be of maximum value to all of the Medical Department personnel in the field. To that end, articles of professional or administrative nature that might be of general interest are needed. All Medical Department officers as well as the Commanding Officers of Medical Department units and the Surgeons of the major commands are solicited for articles of administrative or technical value. Such articles should be forwarded so as to reach the Medical Section, FEC, not later than the 20th of the month preceding the publication of the circular in which it is to appear.

CIRCULAR NUMBER 2

MEDICAL SECTION

GHQ FEC



GENERAL HEADQUARTERS  
FAR EAST COMMAND  
MEDICAL SECTION

CIRCULAR LETTER )  
:  
NO . . . . .5 )

APO 500  
1 May 1947

PART I

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I. Organization of the Medical Section

1. The following is a list of commissioned personnel currently assigned or attached to the Medical Section:

Brig. General James A. Bethea	Surgeon
Colonel John C. Fitzpatrick	Deputy Surgeon
Major Frederick H. Gibbs	Executive Officer

ADMINISTRATIVE BRANCH

Major Frederick H. Gibbs	Chief
Lt. Edwin W. Payne	Assistant

PLANS AND OPERATIONS DIVISION

Colonel John C. Fitzpatrick	Director
Major Frederick H. Gibbs	Deputy Director
Major John V. Painter	Chief, Supply and Fiscal Branch
Captain Robert E. Watson	Supply and Fiscal Branch
Captain Felix G. Rajewski	Chief, Plans and Operations Branch
Captain Glorio J. Patsy	Plans and Operations Branch
Lt. T. J. Shelton	Plans and Operations Branch

## PERSONNEL DIVISION

Lt. Colonel Lewis C. Shellenberger  
Major Sam A. Plemmons  
Captain Joseph W. Jacobs

Director  
Deputy Director  
Chief, Analysis Branch

### CONSULTANTS

Colonel Charles K. Berle  
Colonel Stanley C. Smock  
Lt. Colonel Warner F. Bowers  
Lt. Colonel Ruby F. Bryant  
Lt. Colonel Wilfred A. Emond  
Lt. Colonel Lewis C. Shellenberger

Medical Consultant  
Veterinary Consultant  
Surgical Consultant  
Nursing Consultant  
Physical Standards  
Medical Inspector

### II. Individual Medical Records, Geographical Location of Reporting Medical Installation

2. Pending the revision of AR 40-1025, individual medical records should continue to be prepared to include the general geographical location, as well as the designation of the reporting medical installation. This inclusion will not change the classification of individual medical records.

### III. Complaints from Patients (Attention All Doctors!)

3. The Surgeon's Office, GHQ, FEC, is getting quite a few (too many) complaints from patients and relatives and even Congressmen on the manner in which patients were treated in the hospitals and dispensaries of this theater.

4. These complaints are usually quite exaggerated, and sometimes a mountain is made out of a molehill; however, they all have a basis of truth.

5. These complaints always boil down to one thing, and that is that the doctors, nurses, or attendants, and especially the doctors, have not been kind, considerate, and sympathetic with the patient.

6. There are no charity patients in the Army. They are all private, pay cases, and it is believed that if every doctor treated every patient that he handles exactly as he would a private patient in civilian life, we would have no complaints. This would not only raise the morale of the patients, but it is an excellent habit for doctors to acquire. Young doctors especially may not always be in the Army, and it is well to get into the habit of handling private cases in such a manner as to obtain their complete confidence and trust. It is always important to obtain the confidence and trust of the patient's family and friends should they be present.

7. These complaints are by no means confined to the hospitals, as many of them come from the lack of sympathetic care in dispensaries, and the same rules apply.

8. In this connection, we have also received many complaints somewhat as follows: "The doctor would like to treat me, but he does not have the proper equipment." It is difficult to understand what is to be gained by making such a statement to the patient except to cause worry when he writes such a letter home.

9. All hospitals in this theater are equipped with all facilities which are available in the average hospital in the United States. In fact, the newest drugs, such as streptomycin, are much more available in your hospital than they are in a corresponding civilian hospital in the United States. In Army hospitals you have unlimited X-ray and other laboratory facilities which are only available at considerable expense in the States.

#### IV. Laundry Service

10. Many of the hospitals in the occupied areas do not possess a laundry service which will provide ironed bed linen. It has been noted that a few of the hospitals have been able to secure flat irons through Procurement Demand, and by the employment of foreign nationals have set up an ironing service which supplements whatever other laundry service is provided.

#### V. Patient Feeding

11. A complaint was made at one of the hospitals recently inspected that the X ration scale as supplemented was not adequate for patient's feeding. The reason given was that while the X ration scale as supplemented would provide adequate food for patients fed in cafeteria lines, when the patients were fed on the wards by individual tray service, there were numerous items supplied in insufficient quantities to go around. It is suggested that in such cases individual menus be mimeographed and passed around to the patients prior to meal time so that the items desired can be checked. In this way food waste would be eliminated and the food provided under the present ration scale would be adequate.

#### VI. Hospital Newspapers

12. At hospitals where current newspapers are not received regularly or on time, it is recommended that a one-sheet newspaper be started for patients. The news for this paper can be taken from a dictation-speed radio broadcast, and the sheet to be published could either be made in enough copies for general distribution or in copies to be posted on all patient bulletin boards. If adequate supplies are not on hand for this purpose, expenditures from hospital funds are authorized.

#### VII. Veneral Disease Lectures

13. Reference is made to Section XV, page 13, Circular 3, Medical Section, GHQ, FEC, 1 March 1947, regarding a letter on "Veneral Disease Lectures", written by the Surgeon, Far East Air Forces, to the

## Surgeon, Thirteenth Air Force.

14. This letter may have given the erroneous impression that the Thirteenth Air Force alone was at fault. As a matter of fact the same letter went to all Air Forces, and Surgeon, Far East Command thought that the same criticism might apply to other organizations in the Far East Command.

### VIII. Conservation of Penicillin

15. The supply of penicillin from the Zone of the Interior is expected to meet all requirements of medical department installations for those patients for whom penicillin is therapeutically indicated.

16. The supply of penicillin does not permit the experimental use of this drug or its use in conditions other than those which medical teaching has proved of definite value. Medical department personnel are requested to confine the use of this drug to conditions as indicated above.

### IX. Promotion of Medical Department Officers

17. In announcing further restrictions on promotions for officers (WCL 24858 dated 28 Feb 47), it is significant that the War Department accepted Medical Department officers who may be promoted under Par. 6 AR 605-12 dated 13 Aug 46, and change number one dated 4 Sept 46.

18. Every officer who has performed his duties efficiently and who could benefit from the provisions of the cited regulation should be given such consideration. It is incumbent upon every surgeon to periodically review the status of officers under his technical supervision so as to assure that consideration of promotion has been given.

19. The Army is competing with many other agencies, both government and civilian, for the services of physicians, dentists, and veterinarians. It is logical and fair to effect promotions whenever possible for those officers efficiently serving the Army.

### X. Fresh Frozen Milk

20. Information has been received in this office that a considerable amount of frozen fresh milk is reaching the using organizations out of condition due to a separation of the solids and liquids. It is safe to assume that this condition is the result of improper storage and refrigeration.

21. Paragraph 6, Letter 434.7 (APO 500) Y, Office of The Surgeon General, 14 May 1946, Subject: "Fresh Frozen Milk", states:

a. "It is imperative that frozen fresh milk be kept at a constant non-varying temperature - 10° Fahrenheit - until thawed out for use. If this product is subjected to variations in temperature in storage,

transit, or subsequent storage, rapid deterioration will occur as is evidenced by the development of curd, excessive sediment, off color, and objectionable flavor and odor".

22. Veterinary officers charged with the supervision of storage and transportation of frozen fresh milk should make every effort to see that the above requirements are carried out. When this milk is found to be out of condition due to separation and the formation of curd without spoilage or objectionable odors or flavors it should not be discarded but utilized in making soups, creamed dishes or custards.

#### XI. Recent War Department and FEC Publications

23. The following directives were received by the Medical Section during the month of April:

- a. Circular 64, War Department, 8 March 1947, Section II, Fibrin Foam and Thrombin, Human, (Medical Item 1194000).
- b. Army Regulations 25-70, 1 January 1947, Judge Advocate General's Department - Claims, etc.
- c. Section VIII, Circular 69, War Department, 15 March 1947, WD AGO Form 8-84 - Use of Section 2.
- d. Change 2, AR 345-415, 7 February 1947, Daily Sick Reports.
- e. FEC Circular 34, 24 March 1947, Immunization.
- f. TB MED 114, 28 February 1947, Immunization.
- g. TB MED 72, 4 March 1947, Treatment of Clinical Malaria and Malarial Parasitemia.
- h. War Department Memorandum No. 305-15-10, Change 3, 7 March 1947, List of Recurring Reports Authorized for Preparation.
- i. Circular 59, War Department, 4 March 1947, Hospitalization and Evacuation in the Zone of Interior.
- j. Circular 57, War Department, 1 March 1947, Motion Picture Film and Film Strips.
- k. War Department Memorandum No. 35-6800-1, 6 August 1946, Library Operation in Overseas Departments and Commands.
- l. Section III, Circular 76, War Department, 22 March 1947, Immunization.

#### XII. Military Medicine

24. Attention is invited to the Article entitled "Military

Surgery in World War II", Volume 236, Number 10 of The New England Journal of Medicine, 6 March 1947. This article presents an excellent critique of the overall aspects of Military Medical Service of World War II.

### XIII. Films for Professional Training

25. The following films have been received in the Far East Command and are available for use in professional training for medical officers. Films can be obtained through Signal Corps Film and Equipment Exchange:

Misc. No.	Title	Running Time (Minutes)
947	Amputation of the Lower Extremity (Color) (Distribution requires special authorization) - - - - -	45
1167	Field Psychiatry for the General Medical Officer - - - - -	46
1173	The Army Nurse - - - - -	15
1233	Neurosurgery in Overseas General Hospitals - - - - -	47
1234	Convalescent Care and Rehabilitation of Patients with Spinal Cord Injuries - - - - -	41
1236	Thoracic Surgery - Part I - Hemothorax with a Consideration of Specific Remedial Exercises - - - - -	39
1237	Thoracic Surgery - Part II - Foreign Bodies in the Lung and Mediastinum - - - - -	28
1238	Thoracic Surgery - Part III - Foreign Bodies in the Pericardium and Heart - - - - -	50
1243	Removal of Magnetic Foreign Bodies from the Eye - - - - -	14
1244	Removal of Intrathoracic Magnetic Foreign Bodies - - - - -	20
1245	Repairs of Ruptured Membranous Urethra - - - - -	8
1246	Plastic Repair on Thigh Stump - - - - -	10
1262	Amputation Prostheses and Their Use - Part I - Upper Extremity	30
1263	Amputation Prostheses and Their Use - Part II - Lower Extremity - - - - -	38
1264	Complicated Amputations - Case Reports - - - - -	54
1268	Intravenous Anesthesia (Color) - - - - -	71
1270	The Preparation and Insertion of Tantalum Plate - - - - -	95

Misc. No.	Title	Running Time (Minutes)
1271	Below Knee Amputation - - - - -	34
1272	Radical Orchidectomy - - - - -	36
1273	Technique of Open Amputation (Color) - - - - -	27
1296	Social Adjustment of the Blinded Soldier - - - - -	29
1298	The Mechanism of Cell Division (Silent) - - - - -	25

#### XIV. Integration Applications still being accepted from Medical Department Officers

26. Information has recently been received from the War Department to the effect that the deadline of 31 December 1946 in applying for Regular Army appointments announced in War Department Circular 289, 1946, has been waived for all Medical and Dental Corps officers and for officers of the Medical Administrative Corps and Sanitary Corps who possess the following MOS numbers:

3307 - Bacteriologist	3316 - Nutrition Officer
3309 - Biochemist	7316 - Toxicologist
3310 - Parasitologist	7430 - Industrial Hygienist
3311 - Biologist	7960 - Sanitary Engineer
3314 - Clinical Laboratory Officer	2252 - Clinical Psychologist
3315 - Entomologist	3605 - Psychiatric Social Worker

The above information was disseminated to the major commands in GHQ, FEC, radiogram ZX 42436 of 10 April 1947.

27. Officers who apply for appointment under the provisions of this extension will be processed through the currently established screening centers so long as they remain in operation. It is anticipated that one screening center will remain in operation in each major command until 30 June 1947 unless authorized by CINCFE to close earlier.

28. The War Department has also indicated that it is anticipated that screening centers for the integration of Nurses, Physical Therapists, Dietitians and Occupational Therapists will be established in the near future. These screening centers will process MC, DC, and PC applicants after closure of centers now in operation.

#### XV. Diversional Therapy Supplies and Equipment

29. Recent inspections of hospitals revealed a lack of subject items for craft shops. These items are available to medical supply channels. Attention is invited to the provisions of Army Service Forces catalog MED 10-26, "Medical Department Equipment List for Diversional Therapy, Theater of Operations", dated April 1945. This publication lists the

initial allowances of these items and authorizes replacement supplies on the basis of actual need. The American National Red Cross may be authorized the use and disposition within individual hospital needs of these items in the performance of their authorized duties as indicated in AR 850-75 and at the discretion of the commanding officer of the hospital, unit or installation.

XVI. Benefits to Medical Department of Proposed Legislation Before Congress

30. This article was received in a recent news release from the Surgeon General's Office.

31. Highlights of the benefits to The Medical Department of the proposed legislation now before Congress (HR 2536) on procurement, promotion and elimination of Regular Army officers are outlined in the following statement recently issued by the Office of The Surgeon General:

32. The bill introduced in Congress to provide for the procurement, promotion and elimination of Regular Army officers and for other purposes provides that Section 10 of the National Defense Act be amended to read: "The Medical Department shall consist of Surgeon General with the rank of major general, four assistants with the rank of brigadier general, one of whom shall be an officer of the Dental Corps" is amended to read: "The Medical Department shall consist of one Surgeon General with the rank of major general, one assistant with the rank of major general who shall be an officer assigned to the Dental Corps, and three assistants with the rank of major general or brigadier general as determined by the Secretary of War."

33. In addition it authorizes a strength of active permanent general officers of the Regular Army in the Medical Corps equal to 3/4 of 1% of the authorized active commissioned strength of the Medical Corps of the Regular Army. Of a total authorized strength of active general officers there is authorized 50% in the grade of major general and 50% in the grade of brigadier general.

34. It provides for promotion lists in the Medical Department as follows: The Medical Corps Promotion List, the Dental Corps Promotion List, the Veterinary Corps Promotion List and the Medical Service Corps Promotion List. Of the total authorized promotion list strength for the entire Army, there is authorized 8% in the grade of colonel, 14% in the grade of lieutenant colonel, 19% in the grade of major, 23% in the grade of captain, 18% in the grade of first lieutenant and 18% in the grade of second lieutenant. The authorized number in each of the several grades in each of the several promotion lists is to be prescribed by the Secretary of War by a schedule of percentages in grades for that list, which schedule of percentages may be different for each promotion list.

35. However, a saving clause provides that irrespective of any vacancy in any grade, except general officers and colonels, whenever an officer whose name is carried on any recommended list under provisions

of this section completes for promotion purposes the prescribed number of years in the grade of first lieutenant, captain and major, the authorized number of officers in the grade of captain, major and lieutenant colonel, respectively, in the applicable promotion list shall be temporarily increased, if necessary, to authorize the appointment in that grade of such officer and all officers of his grade and promotion list whose names appear above his on the recommended list and such officers shall be simultaneously appointed in that grade retaining among themselves their existing relative seniority. Until December 31, 1947 initial appointments and promotions shall continue to be made in accordance with the present provisions of the integration and other laws but effective December 31, 1947 no further appointments shall be made except under the provisions of this bill. The bill provides for promotion by selection to all grades to fill existing vacancies. However, irrespective of the existence of any vacancies promotion list officers of the line of the Army may be selected for promotion to the grade of first lieutenant, captain, major and lieutenant colonel upon the completion of three years service, seven years service, fourteen years service and twenty-one years service. However, for the Medical Department each person appointed as an officer of the Regular Army shall at the time of appointment be credited with the amount of service equal to four years for the Medical Corps, three years for the Dental Corps and two years for the Veterinary Corps which means that an officer in the Medical Corps appointed as a first lieutenant will be promoted to the grade of captain upon the completion of three years service; to the grade of major, upon the completion of ten years service and to the grade of lieutenant colonel upon the completion of seventeen years service and is eligible for selection to the grade of colonel upon the completion of eighteen years service if vacancies do not occur in the respective grade at an earlier date. Therefore, effective December 31, 1947, each officer of the Medical Corps, who on that date has less than four years service credit, each officer of the Dental Corps who has less than three years service and each officer of the Veterinary Corps who has less than two years service, shall be credited for promotion purposes with four years, three years and two years service, respectively.

36. Since the integration laws known as Public Laws 281 and 670, 79th Congress, permitted credit for appointment purposes to officers of the Medical Department equal to the difference between their age at the time of appointment and the age of twenty-five years an inequity was created for officers of the Medical Department of the Regular Army whose average age at the time of original appointment was 28 5/12 years. In order to overcome this inequity and place all officers of the Medical Department on equal footing so far as age in grade is concerned, the bill provides for the granting of credit to officers of the Medical Department commissioned between June 27, 1926 and December 28, 1945, and who had continuous active commissioned service in the Regular Army since such appointment.

37. Effective December 28, 1945, such officers are credited, respectively, with additional years of service as follows: Medical Corps 3 5/12 years, Dental Corps 3 1/12 years and Veterinary Corps 1 4/12 years. The service credited shall be counted for promotion and permanent seniority purposes only. No change, however, will occur in the relative permanent

seniority standing of any officer who held a commission in any of these corps on December 28, 1945.

38. The bill provides that on July 1, 1948, or at the earliest practicable date thereafter, Regular Army officers shall be promoted and appointed in the grades of 1st lieutenant, captain, major and lieutenant colonel to fill initial requirements which exist in those respective grades. In the case of all Medical Department Promotion Lists owing to the present reduced strength of the various corps there now exists a number of vacancies which means that officers presently in the various corps of the Medical Department, those being integrated and the ones to come into the service after December 31, 1947 may look forward to more rapid promotion than has ever heretofore existed in the Medical Department of the Army.

39. In addition to promotion to permanent grades in the Regular Army, the bill provides for promotion to temporary rank whenever the number of permanent appointments in the grades of colonel, lieutenant colonel, major, captain and first lieutenant, respectively, is less than the number authorized in these grades in such promotion list.

40. The bill likewise provides that from time to time officers of the reserve components of the United States Army may with their own consent be ordered to active Federal duty for such length of time as the President may prescribe and that when the total number of officers serving on active duty, Regular Army, and all officers of the Army of the United States of any component, exceeds the authorized active commissioned strength of the Regular Army, the Secretary of War shall determine the requirements in each of the several grades and temporary promotions are authorized for officers of these components to fill these requirements.

41. It is anticipated that there will exist in the Medical Department of the Regular Army 1900 vacancies in the Medical Corps, 370 vacancies in the Dental Corps, 10 vacancies in the Veterinary Corps and 440 vacancies in the Medical Service Corps.

42. Even though all of these vacancies in the Medical Department of the Regular Army could be filled there will still be needed several thousand reserve component officers on active duty to meet the requirements in each and every corps of the Medical Department to fulfill the needs of the anticipated strength of the interim Army.

#### XVII. Plans for Medical Department

43. The following is an article from the Army-Navy Journal for 29 March 1947.

44. General of the Army Dwight D. Eisenhower, USA, told the Senate Committee on Armed Services this week that the War Department has drafted legislation to make the Medical Department more attractive and that he has given consideration to the possibility of unifying the military medical departments with that of the Veterans' Administration.

45. The War Department proposes that the pay of specialists be increased by 25 per cent and that the pay of all doctors in general be increased by a flat bonus of up to \$100 monthly. A bill for this purpose is now under consideration by the Bureau of the Budget, the Chief of Staff said.

46. The bill would also permit the appointment of "professors of medicine and surgery" for instruction purposes in similar manner as professors at West Point are appointed, and would authorize the employment of civilian physicians for consultative and other purposes.

47. Such legislation is sorely needed, General Eisenhower declared, if the Army is to continue to attract efficient medical officers and to hold those it now has. The bill is aimed at raising the efficiency of the Army Medical Department to a higher plane, he asserted.

48. The Chief of Staff pointed out that the maintenance of an efficient medical staff is one of his "hardest problems", noting that there are fewer doctors in the Regular Army now than before the War.

49. General Eisenhower revealed the provisions of the bill while testifying 25 March on unification.

50. Replying to a suggestion by Senator Chan Gurney (R-SD), that "some kind of a medical man, should be on the Joint Chiefs of Staff", the Chief of Staff said: "We provide for more rapid advancement of doctors, for greater pay, for their specialization, for providing consultants and specialists civilian people that come in to take over in very high technical things. But it is a bill that is going to cost us a little money. However, we see no way out of it if we are going to have a decent Medical Corps".

51. Leading to this statement by General Eisenhower, the following dialogue took place: Senator Gurney: "I think that if possible some kind of a medical man should be on the Joint Chiefs of Staff along with the others, Air Force and what not. We have got to start thinking about it, or we are going to get into trouble very soon. I would hope that you would have your men look into that, and come up with the right answer."

52. General Eisenhower: "Senator, you give me a chance to ask a little sympathy on one of the hardest problems we have got in the Army, and I am sure it applies to the Navy. We have fewer doctors today in the Army, in the Regular Service, among people who have accepted commissions, than we had when the war started. This problem has been an acute one for so long that I have enlisted the services and help of every man I can think of.

53. "We all agree that that kind of command, unified, is necessary in the field. It finally develops to the point where you can get such an organization as the medical service answering to one man.

Because the medical service is going to have just as big a responsibility to keep Chicago and Gary, Indiana, healthy and operating as they are to keep the soldiers on the front line or sailors in the ships."

54. Senator Gurney: "Well, General, you recognize that this is a critical situation. In case of a national emergency, some one man is going to take charge of the medical men in the armed service and the civilian doctors."

55. General Eisenhower: "But we will have to have planning before we can do that. We could not do it now. And you will have to have a man big enough, like this Secretary of National Defense, to plan for the thing. Today I have been examining with the Veterans' Administration if there isn't some possibility of our combining our Medical Corps with them."

56. General Eisenhower then referred to the bill being considered by the Bureau of the Budget, Senator Gurney stating that the committee would like to have the bill. The Chief of Staff then related the general facts of the bill.

57. Of the plan, Senator Gurney said: "It may be necessary, but still it is a hit or miss plan. I believe we should get our teeth into the problem now, and at least get a chance to give someone authority to work it out and bring the recommendation up to Congress."

58. General Eisenhower: "I think it is vitally necessary."

#### XVIII. Medical Department's Graduate Professional Education Program Underway

59. This article was received in a recent news release from the Surgeon General's Office.

60. Now well under way, but with a number of residencies and internships still open to successful candidates, is the Army Medical Department's graduate professional education program.

61. Primary objective of this permanent project is the provision to Army personnel of the most expert medical and surgical care possible. At the same time, it will offer hitherto unavailable opportunities to recent medical graduates, as well as licensed doctors who accept commissions in the Regular Army to qualify as specialists at an economic saving running into the thousands of dollars.

62. May 1 is the deadline for receipt of applications for residencies in nine military hospitals. Successful applicants will begin their duties on July 1.

63. At the present time, 182 Army medical officers are now undergoing residency training, 28 of whom are applicants for the Regular Army. Successful completion of this postgraduate instruction will furnish

the formal training requirements necessary to enable them to take the American Board examinations for certification as surgeons, urologists, obstetricians, pediatricians, internists, etc. On the basis of the patient loads now being handled by the Army's nine approved teaching hospitals, 373 officer-residents can be accommodated -- more than twice the number now in training. It is estimated that, for a peacetime strength of 800,000 men, the Army will require 573 certified specialists within the next five years; that is, 573 Medical Corps officers who are fully qualified as plastic surgeons, pathologists, radiologists, psychiatrists or in one of the other specialties or sub-specialties. At present only 82 members of the Regular Army Medical Corps are fully accredited specialists.

64. Residency and internship programs are being conducted in the following general hospitals:

Brooke, 3,281 beds, Fort Sam Houston, Texas; Fitzsimons, 3,517 beds, Denver, Colo.; Letterman, 2,525, San Francisco; Madigan, 3,953, Tacoma, Wash; Oliver, 2,600, Augusta, Ga.; Percy Jones, 4,261, Battle Creek, Mich.; Walter Reed, 2,600, Washington, D. C.; William Beaumont, 2,350 beds, El Paso, Texas, and the Army and Navy General Hospital, with 550 beds for soldiers, at Hot Springs, Arkansas. Actively cooperating in the professional education project are 190 civilian teaching consultants, all of whom are certified in their respective specialties and a great percentage of whom are war veterans. These specialists are giving an average of 15 hours weekly to this consultancy service. Walter Reed Hospital, for example, has 48 of these doctors on its visiting staff. They represent 19 medical and surgical specialties and subspecialties, plus the medically-related specialty of psychology. On July 1 the nine graduate training hospitals previously mentioned will include interns on their house staffs for the first time since the war's end. While under this training, the new medical graduates who have accepted commissions in the Organized Reserve Corps will receive pay and allowances of a First Lieutenant. One hundred internships have been authorized. Further information on the graduate professional training program may be obtained by writing to the Office of the Surgeon General, U. S. Army, Pentagon Building, Washington 25, D. C.

65. Major General Norman T. Kirk, The Surgeon General, has recently appointed four leading doctors as Honorary Consultants to the Army Medical Library. The Association of Honorary Consultants to the Army Medical Library, which now has 97 members, serves as an advisory body to the Surgeon General on matters pertaining to the Library. The new members include: Major General Paul R. Hawley, USA (Ret.), Medical Director of the Veterans' Administration; Dr. Michael E. DeBakey, Associate Professor of Surgery, Tulane University Medical School; Colonel Albert G. Love, M.C., USA (Ret.), Formerly Assistant Surgeon General; Dr. Elliot C. Cutler, Mosley Professor of Surgery, Harvard University Medical School.

## PART II

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### XIX. Professional Training

Most of the Medical Corps Officers in this theater are interested in continuing their professional training when they return to the States.

Below is published the Professional Staff Program for a typical week at Brooke General Hospital, Fort Sam Houston, Texas (week beginning March 17th, 1947).

In addition to the regular staff at Brooke, there are twenty-four Civilian Consultants who take part in this teaching program. These include the leading Board Members in San Antonio and some of the professors from the University of Texas Medical School.

Incidentally the Annual Report from Brooke for 1946 shows that they delivered 1228 women and had a total of 7,700 major and minor surgical cases. Brooke now has 51 Residents.

There are nine General Hospitals in the States that run a similar Residency Program. The program for a week at Brooke General Hospital is as follows:

#### TUESDAY

- 1300-1400 Medical Staff Conference, Chronic Nephritis, Active and In-active. Presented by - 1st Lt. Harold Grant, MC, Discussion by - Major Samuel Sandifer, MC.
- 1400-1500 Surgical Staff Conference. 1. Urological Emergencies. Presented by - Lt. Colonel Gladen R. Hamilton, MC, and 1st Lt. Roy R. Roberts, MC. 2. Diagnosis and Treatment of Hoarseness. Presented by - 1st Lt. Carl M. Quick, MC. Discussion by - Colonel Henry S. Murphy, MC.

1500-1600 Tumor Clinic - Tumor Board.

#### WEDNESDAY

1430-1645 Neurocinema and N.P. Problem Clinic. Colonel William C. Porter, MC.

#### THURSDAY

1300-1400 Clinicopathological Conference. Colonel Elbert DeCoursey, MC.

1400-1500 Neuropsychiatric Conference. EEG and its clinical applications. Presented by - 1st Lt. Gilbert H. Glaser, MC.

1500-1600 X-Ray Conference. Presentation of interesting cases. Major Alfred J. Ackerman, MC, and Dr. Roy G. Giles, Consultant.

1600-1700 Surgical Diagnostic Conference. Colonel Sam F. Seeley, MC and Staff. Dr. C. S. Venable, Consultant.

#### THURSDAY NIGHT

2000 - Streptomycin -- Present Status. Presented by - Major Edwin J. Pulaski, MC. Meeting to be held at the Brooke Army Medical Center Officers' Club. Social hour follows.

#### FRIDAY

1530-1630 Dental Conference. Arco Odontalgia. Presented by - 1st Lt. A. E. Mondros, D.C.

1645-1700 Administrative Staff Meeting. Commanding Officer.

#### SATURDAY

1000-1200 Medical Diagnostic Conference. Presentation of Problem Cases. Colonel John G. Knauer, MC, and Staff. Dr. David R. Sacks, Consultant.

#### FORMAL WARD ROUNDS

<u>Neuropsychiatry</u>	Monday	0930-1130
	Friday	0930-1130

#### Medical

Infectious Dis.	Monday	0900-1100
Cardiovascular Dis.	Monday	0900-1100
General Medicine	Monday	1400-1600
Metabolic	Monday	1400-1600
Dermatology & Syphilology	Tuesday	0800-0900
	Wednesday	0800-0900
	Thursday	0800-0900

Arthritis	Wednesday	0800-1000
Pediatrics	Wednesday	1330-1630
Cardiovascular Dis.	Thursday	0900-1100
Metabolic	Thursday	0900-1100
Pulmonary Dis.	Friday	0900-1100
Enl. Gen. Med.	Friday	1300-1500
Gastro-Intestinal Dis.	Friday	1300-1500

#### Surgical

General	Tuesday	0830-1030
E.N.T.	Thursday	1400-1600
	Saturday	0900-1100
Eye	Monday	1300-1400
	Wednesday	1300-1400
	Friday	0800-1000
Orthopedic	Monday	1400-1600
	Saturday	0800-1000
Urology	Wednesday	0800-1000
	Saturday	0800-1000
OB & GYN	Wednesday	1300-1700
Thoracic	Monday	1300-1500

#### HISTOPATHOLOGY CONFERENCES

Dermatological Histopathology	Monday	1400-1600
Surgical & Dermatopathology	Tuesday	1600-1700
Surgical & Bone Pathology	Tuesday	1600-1700
Gross Neuropathology	Wednesday	1300-1400
Surgical and OB-GYN Pathology	Wednesday	1600-1700
Surgical and Eye Pathology	Thursday	1600-1700
Surgical Pathology	Friday	1600-1630

#### MEDICAL LITERATURE REVIEWS

Gen Surgery	1st Week - Saturday	1000-1200
Urology	2nd Week - Saturday	1000-1200
OB & GYN	4th Week - Saturday	1000-1200
EENT	Every Wednesday	1600-1700
X-Ray	Every Thursday	1600-1630
Laboratory	1st & 3rd Monday	1930-2200
N.P.	2nd & 4th Tuesday	2000-2100
Orthopedic	3rd Friday	1300-1500
Medical Sv	Monday, March 17th	1300-1400

#### CLINICS

E.M. Out Patient Clinic	Mon. thru Fri.	0800-1700
Pediatrics	Mon. thru Fri.	0830-1200
Dermatology	Mon. thru Fri.	0930-1200
Veneral Diseases	Mon. thru Fri.	0800-1200
Electrocardiography	Mon. thru Fri.	0800-1200

E.E.N.T.	Mon. thru Fri.	0830-1700
Orthopedic	Mon. thru Fri.	0800-1700
Septic Surgery	Mon. thru Fri.	1300-1400
GYN	Mon. thru Fri.	0830-1115
Dental Clinic	Mon. thru Fri.	0800-1630
Allergy Clinic	Mon. thru Fri.	0800-1700
General Surgery (Out Pnt Svc)	Tues. & Thurs.	1300-1600
Proctology	Mon., Wed., & Fri.	1400-1600
Urology	Mon., Wed., & Fri.	1300-1600
Obstetrical Clinic:		
Pre-Natal Check-up for D/E	Monday	0800-1630
Pre-Natal Check-up for D/O	Tuesday	0800-1630
Pre-Natal Check-up for D/E	Wednesday	0800-1130
6-week post-partum check-up	Thursday	0800-1130
First Physical D/E	Thursday	1300-1630

#### XX. Use of Sodium Amytal and Sodium Pentothal

It has come to the attention of the Surgeon's Office that sodium amytal, sodium pentothal, and similar drugs are being used occasionally under circumstances that might be subject to severe criticism.

Hospital and dispensary commanders should see that medical officers under them are discreet in the use of such drugs.

The use of sodium pentothal anesthesia for testing a patient's blood pressure is not justified except under extraordinary circumstances which are not likely to occur in this theater.

The use of sodium amytal as "truth serum" is not authorized.

The FORCEFUL use of such drugs, except when absolutely necessary in the treatment of such conditions as disturbed mental cases, is strongly disapproved.

#### XXI. Intravenous Solutions

Extensive study of our present stock of intravenous solutions has failed to establish any definite age at which these solutions should be condemned.

The small 50 cc bottles seem to deteriorate much more rapidly than the large Vacoliter bottles. This may be due to the soft rubber stoppers on the former. These small bottles should be as fresh as possible. These small 50 cc bottles should not be used intravenously. This is especially important because it is known that water and other substances change their pH on storage through the formation of carbonic acid. This will not take place as long as the vacuum is maintained.

The large Vacoliter bottles should always be examined very

carefully to see: (a) that the solution is perfectly clear, (b) that it is free from all particles, (c) it is of normal color, (d) if there is evidence that the vacuum has been broken, (e) if there is moisture around the stopper after the metal foil has been removed.

When none of the above are present, the solution seems to be safe. If there is any question about its safety, it should not be used.

Laboratory study has reached the conclusion that granted the solutions for intravenous use are in proper condition, the majority of untoward reactions following administration are due to pyrogens resulting from improper tubing or the improper preparation of tubing and needles prior to the injection. Scrupulous care in the preparation of these sets is of utmost importance. Deteriorated or old rubber tubing should not be used. The care and storage of intravenous sets between periods of usage is equally important. It is recommended that all concerned familiarize themselves with the provisions of Paragraph 8, TB MED 204 which gives excellent directions for the preparation and care of intravenous sets.

#### XXII. Use of X-Ray Film in Occupation Areas and Korea

The Medical Section, General Headquarters, Far East Command, is cognizant of the relative shortage in some medical installations of X-Ray films of certain sizes made in the United States. In lieu of an adequate supply of United States films for all purposes, Japanese films have been substituted. These Japanese films have not proved entirely satisfactory in certain instances where exact detail is necessary to establish an X-Ray interpretation. All possible steps have been taken to facilitate the supply of United States films to medical installations in the Pacific theater. Problems of manufacture and transportation will probably result in the need for a continuation of the use of Japanese made films until a more adequate supply from the United States is received. It is recommended that where United States films are available that these films be reserved for such cases where a detailed X-Ray study is necessary such as suspected early pulmonary tuberculosis and other similar conditions. Japanese film should be used for routine work.

Attention is invited to the fact that the sole responsibility and liability for medical care and hospitalization of Japanese National employees on duty with the occupation forces rests with the Imperial Japanese Government. Therefore, the use of United States film or Japanese film secured on procurement demand is not authorized in connection with physical examination and medical care of Japanese employees referred to above.

With reference to conservation of X-Ray film, the following is quoted from the War Department directive: "Current status of availability requires that utmost economy be practiced in consumption of X-Ray films. Wherever practicable only one view will be taken in lieu of stereoscopic examinations particularly in routine annual physical examinations and examinations of applicants for integration in the Regular

Army, separations, enlistments, and inductions. Wherever photoradiographic equipment is available for such examinations only 4 by 5 chest films will be routinely taken".

### XXIII. Theater Laboratory Service, Part II

This is the second of three installments of an article prepared by Lt. Colonel W. D. Tigertt.

#### Parasitology:

Fecal parasites - those of primary importance because of direct transmission from man to man, are Endamoeba histolytica, Hymenophsis nana (dwarf tapeworm) and Enterobius verinularis (pin-worm). Other common intestinal parasites require an intermediate host or a period of time outside the human body before again becoming infectious for man.

All stools should be examined grossly (by the ward officer) and the laboratory should routinely perform a direct microscopic examination and a concentration procedure. The use of zinc sulphate centrifugal flotation (p. 685, Simmons and Gentzkow) or ether sedimentation is recommended for this purpose. The latter technique is not generally available and is outlined below.

The following adaptation of the ether sedimentation technique has been used routinely for the recovery of cysts and ova. No critical comparison has been made with other techniques.

Precysts of ameba as well as cysts concentrate well, as do the following ova: Trichuris trichiura, hookworm, Trichostrongylus orientalis, Clonorchis sinensis and the schistosoma ova. Enterobius vermicularis and Hymenolepis nana are only moderately well concentrated.

The main advantage of the formalization is in relation to Endamoeba histolytica because the typical nucleus is retained noticeably better if the specimen is formalized. The technique is successful with preserved specimens.

#### 1. Comminution of the stool.

Partial comminution of entire stool, with an appropriate amount of saline, can be accomplished in the stool box. A suitable amount of saline will make it possible to recover 10-12 cc of strained emulsion, which when centrifuged will yield 1-2 cc of fecal sediment.

#### 2. Straining.

Two layers of gauze are satisfactory. The emulsion is collected in a 15 cc centrifuge tube.

#### 3. Washing.

The emulsion is centrifuged and decanted. It is advisable to add saline again, mix thoroughly with applicators, centrifuge, and decant a second time.

4. Formalization.

The remaining fecal sediment (1-2 cc) is thoroughly mixed with 10 cc of 10% formalin (0.5% glycerine is added). Five minutes should be allowed for fixation.

5. Addition of Ether.

About 3 cc of ether are added to the formalized specimen. The tube is stoppered and vigorously shaken. The specimen is then centrifuged at a relatively slow speed (at #2 on the anglearm table centrifuge) for about 2 minutes. Ether, superficial debris and formalin are completely decanted (an applicator is suitable for freeing the debris from centrifuge tube).

6. Coverslip preparation.

The sediment remaining in the centrifuge tube is mixed thoroughly with the fluid, that drains back from the tube wall, and poured onto a glass slide. An applicator may be used to drag the few drops to the lip of the tube, and it is especially useful in controlling the amount of sediment that escapes onto the slide (an excess should be avoided). A small drop of 2% iodine solution is placed near the drop of sediment, and mixed with it by using the edge of a coverslip. Finally the edge of the coverslip is pushed into the drop, allowing the fluid portion to run under the cover glass, and, at the same time, pushing the coarse debris aside.

Serology:

All serological procedures require a meticulous compliance with directions if the results are to be valid.

Prevention of hemolysis: This is a definite problem, particularly in the tropics, or if blood must be shipped. The following is a direct quote from Kahn, Reuben L: "Technique of the Standard Kahn Test".

"1. Blood specimens for serologic tests should be withdrawn preferably before meals.

2. All equipment (syringe, needle, tube and stopper) used in withdrawing blood specimens must be chemically clean and dry. If specimens are to be mailed, the use of sterile equipment is indicated.

3. The skin at the site of puncture, after appropriate cleansing,

must be dry before withdrawing blood.

4 The needle should be at least 20 gauge and it should be removed from the syringe before transferring blood to the tube; also this transfer should be affected gently to prevent disruption of the fragile cells.

5. The blood specimen should stand for thirty minutes at room temperature; agitation of any kind during this period should be avoided.

6. The blood specimen should then be placed in the ice box until time for examination.

7. If blood specimen is to be mailed;

- a. The specimen should be kept in the ice box until time for mailing.
- b. Mailing containers with packing material should also be kept in the ice box.
- c. The specimen should be mailed the same day the blood is drawn. Blood serum possesses anti-bacterial properties only when fresh
- d. When mailing serum it should be separated from the blood clot under as closely sterile conditions as possible and prepared for mailing as above.  
It should be mailed in an unheated state.
- e. Cork and label (using adhesive tape).

8. Attention to small details in obtaining blood or in preparation for shipping will eliminate the need of having to retake and remail a specimen on account of spoilage. Blood has good inherent keeping qualities and with due care spoilage can be prevented."

Cleaning laboratory glassware: All serological procedures require properly cleaned glassware. The following procedure is recommended: Dichromate cleaning solution - (1) Pour 1 liter of commercial concentrated sulfuric acid (#1036000) into 35 cc of saturated aqueous solution of sodium dichromate, technical (#1432000).

Caution: Never pour the aqueous solution into the acid. Handle with care; avoid contact with flesh and clothing.

(2) Soak the glassware in this solution for several hours or overnight and then rinse repeatedly in hot tap water until all traces of cleaning solution are removed. Finally rinse in distilled water and allow to dry.

Standard Kahn Test -

1. Inactivate sera at 56°C for 30 minutes.
2. Prepare working antigen as follows:
  - a. Into a mixing tube (flat bottom vial Medical Supply item #4430300) place 1 cc of stock Kahn antigen.
  - b. Into a similar tube place the amount of normal saline as stated under "Titer" on the label of the stock Kahn antigen bottle. (The 1000 cc container Standard Intravenous Saline may be used.)
  - c. Mix saline and antigen by pouring contents from one tube to the other with smooth, rapid motions, first pouring saline into antigen. Repeat transfers 12 times.
  - d. Allow this working antigen to stand for 10 minutes to "age" before using. The antigen is not good for longer than 30 minutes before preparation. Shake before using. Stoppers should be covered with tin foil (#5614500).
3. The standard Kahn test is a three-tube test.
  - a. The tubes (#4436400) are placed in the rack three deep.
  - b. After the antigen has stood for ten minutes it is shaken well to insure an even mixture and is then pipetted into the bottom of the tubes in the following varying amounts:
 

Back tube	0.0125 cc
Middle tube	0.025 cc
Front tube	0.05 cc
  - c. A Kahn antigen pipette (#4365600) is used to deliver the antigen.
  - d. The inactivated serum of the patient is then added to the tubes containing the antigen, 0.15 cc to each tube.
4. Immediately following the addition of serum the racks are shaken vigorously by hand for ten seconds to insure thorough mixing of the ingredients. The serum-antigen should stand for about five to seven minutes (preferably not less than three minutes and not more than 10 minutes) at room temperature before the mechanical shaking for three minutes (see below).
5. Control sera should be initially obtained from a functioning laboratory. At the end of each series of tests positive and negative sera should be retained for use in the next test. Store in a refrigerator.
 

A set of three controls are set up for each vial of diluted antigen.

  - a. The same amounts of antigen are used as in the regular test.

- b. Control No. 1 - Add 0.15 cc of 0.85% salt solution to antigen in each of three tubes.
- c. Control No. 2 - Add 0.15 cc of known positive serum to antigen in each of the three tubes.
- d. Control No. 3 - Add 0.15 cc of known negative serum to antigen in each of the three tubes.
- e. A fourth control of "doubtful" serum is desirable in many instances.

6. The tests (and controls) are shaken in a standard shaking machine for three minutes. (275-285 oscillations per minute with a stroke of  $1\frac{1}{2}$  inches).

7. Addition of salt solution

- a. Add 1 cc of saline to the tubes in the first row in the rack.
- b. Add 0.5 cc of saline to the remaining tubes in the rack.

8. Shake rack by hand sufficiently to mix the ingredients.

9. In the reading of this test proper training, experience and lighting arrangements are necessary. Beginners should read as many tests as are available in comparison with an experienced reader. Uniformity in the reading of results will be gained by the use of the contact surface of a microscopic mirror and a constant source of light from the microscopic lamp. A two to three-fold magnification obtained by holding the tube two to three inches above the mirror will give sufficient magnification. Each of the three tubes of the test is read independently. A definite precipitated suspended in a clear medium is read 4 plus. Proportionately weaker reactions are read 3, 2, and 1 plus.

a. Duplicate Readings - The procedure is outlined in Paragraph 8, page 127, "Laboratory Methods of the United States Army" by Simmons and Gentzkow. The first reading is made immediately after the addition of salt solution. The second reading is made fifteen minutes later, the racks remaining at room temperature during the interval. The final interpretation is based on the total number of pluses resulting from both readings as follows:

0 to 3 pluses, inclusive = negative, e. g.  $-2 - 1$  <sup>+</sup>

4 to 12 pluses, inclusive = doubtful

13 to 24 pluses, inclusive = positive

b. Single Readings - Single readings may be made within five to ten minutes after the addition of the salt solution and will give comparable results to the duplicate readings described above. The

interpretation is based on the following table:

0 to 2 pluses, inclusive = negative

3 to 5 pluses, inclusive = doubtful

6 to 12 pluses, inclusive = positive

10. Final Report: The terms negative, doubtful, or positive as indicated above are entered on the report slip. The actual tube reading should be recorded in the laboratory.

#### Quantitative Kahn Test:

1. The Quantitative Kahn Test gives the serological titer on the same basis as the Widal (agglutination test) gives the titer in typhoid fever, namely by determining the highest dilution in serum with salt solution which gives a positive reaction.

2. The Quantitative Kahn should be performed on all sera showing a positive reaction in the Standard Kahn Test. Sera giving a negative or a doubtful reaction in the Standard Kahn Tests are not examined by the Quantitative procedure.

3. The results of the Quantitative Kahn Test are reported in Kahn units. The possible numerical Quantitative Kahn reports are less than 10, 20, 40, 80, 160, and 320 Kahn units. For extremely high titer serum higher dilutions may be prepared.

4. In order that any significant information may be obtained from the Quantitative Kahn Test, all tests on any individual should be performed under the same conditions in the same laboratory.

Spinal Fluids: Complement fixation tests and colloidal gold tests are ordinarily performed only in central laboratories. The cell count and Pandy or Nonne-Apel't should be performed at the local laboratory within thirty minutes after the spinal fluid is withdrawn (TB MED 198).

Blood Typing - Reference should be made to TB MED 204 for a full discussion. This is the only Army publication containing directions for confirmation of Rh type. A brief description of this method is reproduced below.

Determination of Rh type is done by testing the red cells against anti-Rh serum. Rh-positive cells are agglutinated by anti-Rh serum and Rh-negative cells are not. The technique for Rh testing is as follows:

(1) Place one drop of anti-Rh serum in a small, clean, round bottom glass test tube.

(2) Add one drop of a fresh 1 to 2 percent suspension of the

unknown cells in 0.85 percent solution of sodium chloride.

(3) Incubate in a waterbath at 37°C. for 60 minutes.

(4) After incubation, very gently resuspend the sedimented cells and inspect, macroscopically, for agglutination.

(5) If clumps are not apparent, centrifuge at 1,000 rpm for one minute; then very gently resuspend the cells and reread. (It is important to resuspend the cells very gently, since clumps of Rh-positive cells are easily broken up).

(6) If clumps are not visible macroscopically, examine microscopically.

(7) Agglutination indicates that the cells are Rh-positive. Absence of agglutination indicates that the cells are Rh-negative.

#### Macroscopic agglutination test:

##### 1. General

a. Glassware must be chemically clean but not necessarily sterilized.

b. Equipment peculiar to serology is used such as 1.0 and 5.0 cc serological pipettes, Kahn tubes and racks.

c. Blood is drawn, allowed to clot and serum removed using centrifuge, if necessary. Separated serum is then inactivated in a 56°C. water bath for one hour.

##### 2. Technique:

a. A series of nine tubes is set up for each agglutination requested, with the exception of typhoid (where two series are used) and for the Weil Felix reaction, where three series for the Proteus antigens used in the diagnosis of rickettsial disease are required.

b. To each tube in the series add 0.5 cc of sterile isotonic saline with the exception of the first to which 0.9 cc of saline is added.

c. To the first tubes in each series containing 0.9 cc of saline, 0.1 cc of inactivated serum to be tested is added, thus giving a 1:10 dilution of the serum. The saline and serum are mixed and 0.5 cc is removed to the second tube giving a dilution of 1:20. After mixing 0.5 cc is transferred to the third tube and so on until all but the last tube contain serum. From the next to the last tube 0.5 cc is removed and discarded. The last tube is the saline antigen control.

d. To each tube add 0.5 cc of diluted antigen (suspensions of the various organisms may be obtained from the general laboratories),

thus giving a serum dilution of 1:20 in the first tube, 1:40 in the second tube and so on until the eighth has a serum dilution of 1:2560.

Note: A greater or lesser number of tubes may be used depending on the information desired and smaller quantities of serum and antigen may be used but the ratios as given above must be maintained.

e. Place racks with tubes in 37°C. water bath for one hour, remove and place in refrigerator (0°-4°C) overnight. In morning of following day place in 37°C water bath for about five minutes, remove and read results.

For rapid reading tubes may be shaken on a Kahn shaker for ten minutes, centrifuged for ten minutes and results read. It is desirable, however, to run another series by the routine method since there are occasional minor variations in the results obtained by the two methods.

### 3. Reading results.

a. All tubes are compared with the control which must show no clumping or agglutination and no clearing of the suspension.

b. Using clearing of the suspension and clumping of bacteria as criteria each tube is graded as 4 plus, 3 plus, 2 plus, 1 plus,  $\pm$  or doubtful and negative as follows:

4 plus - complete clearing of supernatant and definite clumping with sedimentation.

3 plus - almost complete clearing of supernatant and definite clumping with sedimentation.

2 plus about 50% clearing of supernatant and moderately definite clumping with or without sedimentation.

1 plus - very slight or no clearing and very slight clumping.

$\pm$  no clearing and indefinite clumping.

Negative - no clearing and no clumping.

Size of bacterial clumps varies with the antigen used and should not be confused with the amount of clumping. For example Typhosa "H" antigen gives a heavy snow flake like clump and Typhosa "O" antigen gives a fine granular clump.

c. Results are reported as titer for the serum dilution with the smallest amount of serum read as two plus. The final tube showing 50% agglutination, then, is reported as the titer or endpoint. The technician must be consistent in reading endpoints. An example of a report is "Brucella abortus titer: 1:160".

4. False results: The presence of non-specific antibodies in serum at times gives agglutinations with specific antigens in the absence of specific antibodies. Usually such agglutination is very fine as compared, say, to a typhoid "H" agglutination. Such agglutination is usually associated with patients in febrile period of illness. The same titre of such agglutination may obtain simultaneously for two such antigenically distinct organisms as B. abortus and E. typhosa, so that the average technician will be aware of the non-specificity of such a reaction.

Inactivation of serum eliminates most non-specific antibodies but at times differential absorptions must be done to obtain true results. All sera showing non-specific agglutination should be referred to a general laboratory.

PART III

STATISTICAL

XXI. Evacuation

1. During the period 1 March 1947 to 28 March 1947, the following patients were evacuated from the several major commands:

	<u>AIR</u>	<u>WATER</u>	<u>TOTAL</u>
JAPAN	153	606	759
MARBO	21	0	21
PHILRYCOM	43	56	99
KOREA	183	0	183

2. The following are the evacuations per 1000 strength for the period 1 March 1947 to 28 March 1947:

JAPAN	5.2
MARBO	1.3
PHILRYCOM	1.2
KOREA	3.0 *
THEATER	3.5

3. As of 28 March 1947 the following number of patients were awaiting evacuation:

JAPAN	74
MARBO	8
PHILRYCOM	41
KOREA	74

XXII. Hospitalization

1. The Bed Status Report as of 28 March 1947 is as follows:

	<u>Total T/O Beds Present</u>	<u>Total T/O Beds Established</u>	<u>Total T/O Beds Occupied</u>
JAPAN	4950	4950	3958
MARBO	525	525	267
PHILRYCOM	4050	3453	1973
KOREA	2150	1560	1204
Total	11,675	10,488	7,402

\* Patients evacuated to Japan from Korea for onward evacuation.

2. The percent of authorized beds occupied and the percent of operating beds occupied for the period ending 28 March 1947 are as follows:

	<u>Percent Authorized Beds Occupied</u>	<u>Percent Operating Beds Occupied</u>
JAPAN	80	80
MARBO	51	51
PHILRYCOM	49	57
KOREA	56	77
THEATER	63	70

3. Tables showing various admission rates are listed below.

ADMISSION RATES PER 1000 PER ANNUM

All Causes

<u>Week Ending</u>	<u>THEATER</u>	<u>MARBO</u>	<u>PHILRYCOM</u>	<u>JAPAN</u>	<u>KOREA</u>
7 March 47	1003	367	641	1352	991
14 March 47	999	420	697	1231	1007
21 March 47	979	298	710	1236	914
28 March 47	844	294	553	1099	773

Disease

7 March 47	966	249	579	1289	917
14 March 47	937	366	650	1168	923
21 March 47	911	262	664	1162	822
28 March 47	793	199	511	1047	721

Injury

7 March 47	68	118	61	63	74
14 March 47	62	54	47	63	84
21 March 47	68	36	46	74	92
28 March 47	51	93	42	52	52

Psychiatric

7 March 47	24	10	35	19	22
14 March 47	11	9	8	13	8
21 March 47	11	13	14	10	11
28 March 47	21	13	18	29	5

# ADMISSION RATES PER 1000 PER ANNUM

## Organic Neurological Disease

<u>Week Ending</u>	<u>THEATER</u>	<u>MARBO</u>	<u>PHILRYCOM</u>	<u>JAPAN</u>	<u>KOREA</u>
7 March 47	.3	0	.6	.3	0
14 March 47	.5	0	.6	.7	0
21 March 47	1.2	0	1.9	.3	2.6
28 March 47	.9	0	1.3	.7	0

## Common Respiratory Disease

7 March 47	327	0	75	504	343
14 March 47	271	19	55	398	328
21 March 47	245	26	83	348	277
28 March 47	266	0	60	394	276

## Influenza

7 March 47	12	3.3	.6	19	11
14 March 47	12	0	.6	20	14
21 March 47	11	0	0	19	8
28 March 47	7	0	0	14	2.7

## Primary Atypical Pneumonia

7 March 47	12	0	4.2	9	30
14 March 47	15	9	1.2	14	37
21 March 47	14	6	3.2	15	27
28 March 47	11	16	2	11	24

## Common Diarrhea

7 March 47	4	0	3.0	.7	14
14 March 47	9	0	19	2.1	14
21 March 47	5	0	14	1.1	5
28 March 47	5	0	11	2.6	3.6

## Bacillary Dysentery

7 March 47	.5	0	1.8	0	0
14 March 47	.2	0	.6	0	0
21 March 47	1	0	3.2	.3	0
28 March 47	1.0	0	3.9	0	0

ADMISSION RATES PER 1000 PER ANNUM

Amebic Dysentery

<u>Week Ending</u>	<u>THEATER</u>	<u>MARBO</u>	<u>PHILRYCOM</u>	<u>JAPAN</u>	<u>KOREA</u>
7 March 47	1.3	0	4.8	0	0
14 March 47	2	0	7	.3	0
21 March 47	2.9	0	9	0	1.7
28 March 47	3.9	0	14	.4	0

Malaria

7 March 47	9	0	32	0	.8
14 March 47	11	6	39	.3	1.7
21 March 47	12	23	41	0	.8
28 March 47	9	6	31	.7	.9

Infectious Hepatitis

7 March 47	3.2	0	4.8	2.8	2.5
14 March 47	2	0	1.9	2.1	2.6
21 March 47	2.2	0	3.8	2.2	.8
28 March 47	1.9	3	0	2.9	1.8

Mycotic Dermatoses

7 March 47	2.5	0	1.2	4.6	.8
14 March 47	4	0	7	2.8	2.6
21 March 47	6	0	11	5	1.7
28 March 47	4	0	7	4.4	0

Venereal Disease

7 March 47	109	47	116	125	76
14 March 47	94	60	107	107	53
21 March 47	102	23	117	114	72
28 March 47	92	28	114	102	54

